

MENTALLY ILL OFFENDER

Program Evaluation Survey

This survey will become part of your county's MIO contract with the Board of Corrections. For purposes of this survey:

- “Program” refers to a defined set of interventions that will be given to a specified research sample in order to evaluate well-stated hypotheses. If you have more than one Program, please fill out a separate survey for each Program.
- “Research Design” refers to the procedures you will use to test the stated hypotheses for your Program. In some instances you will have more than one Research Design for a Program, in which case a separate survey must be completed for each Research Design.
- “Project” refers to all the work that you propose to do with the MIO Grant. For example, if you have two Programs and two Research Designs for each Program, the entire effort would constitute your Project (and you would complete four surveys).

To simplify the task of completing this survey, we refer you to two sources: 1) the initial Research Design Summary Form, and 2) your Program’s responses to the technical compliance issues identified during the grant review. If no additional information was requested of a particular item on the Research Design Summary Form, you can enter the original text into the appropriate space below. If more information was requested, provide a more complete response.

| | | |
|-----|--|---|
| 1. | County: San Mateo | |
| 1a. | Researcher: David M. Williams, Ph.D. | Phone: 408-445-0473 |
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| 1c. | Principal Data Collector: TO BE HIRED | Phone: |
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| | | E-mail: |

2. **Program Name:** Current Board of Corrections grant participants have found it useful to pick a name that helps them to create a Program identity (two examples are the “IDEA” Program and the “Home Run” Program). Indicate the title you will be using to refer to your Program.

Options Project

3. **Treatment Interventions:** Describe the components of the Program that you will be evaluating. Another way of saying this is, “Describe how the ‘treatment’ offenders (those in the Program) will be treated differently than the comparison offenders (e.g., services while incarcerated, more intensive supervision, more thorough assessment, a wider range of services, more aggressive case management, better aftercare).”

Options Program participants will receive more intensive case management, additional probation supervision, additional chemical dependency treatment and housing.

4. **Research Design:** Describe the Research Design that you will be using. Issues to be addressed here include the name of the design (e.g., true experimental design), the use of random assignment, and any special features that you will include in the design (e.g., the type of comparison group you will use for quasi-experimental designs).

A true experimental design is proposed. Specifically, a Randomized Multiple Time-Series Design is proposed with measurement intervals occurring every 6 months. This design is diagrammed below:

| | | Measurement Intervals | | | | | | | | | | | |
|---|-------------|-------------------------|----------------|----------------|----------------|---------------------|-----------------|------------------|------------------|------------------|--------------------------|-----------------|-----------------|
| | | Phase A (Pre-Tx period) | | | | Phase B (Tx period) | | | | | Phase A (Post-Tx period) | | |
| | Group | T-24 months | T-18 months | T-12 months | T-6 months | T | T + 6 months | T + 12 months | T + 18 months | T + 24 months | T + 30 months | T+36 months | T+42 months |
| R | Options | O ¹ | O ² | O ³ | O ⁴ | O ⁵ | O ⁶ | O ⁷ | O ⁸ | O ⁹ | O ¹⁰ | O ¹¹ | O ¹² |
| R | Traditional | O ¹ | O ² | O ³ | O ⁴ | O ⁵ | O ⁶ | O ⁷ | O ⁸ | O ⁹ | O ¹⁰ | O ¹¹ | O ¹² |

O_n = Observation periods

R = Randomization to treatment groups

T = Time treatments are implemented

Tx = Treatment

- 4a. Check (✓) the statement below that best describes your Research Design. If you find that you need to check more than one statement (e.g., True experimental and Quasi-experimental), you are using more than one Research Design and will need to complete a separate copy of the survey for the other design. Also, check the statements that describe the comparisons you will be making as part of your Research Design.

| Research Design (Check One) | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | True experimental with random assignment to treatment and comparison groups |
| <input type="checkbox"/> | Quasi-experimental with matched contemporaneous groups (treatment and comparison) |
| <input type="checkbox"/> | Quasi-experimental with matched historical group |
| <input type="checkbox"/> | Other (Specify) |
| Comparisons (Check all that apply) | |
| <input type="checkbox"/> | Post-Program, Single Assessment |
| <input type="checkbox"/> | Post-Program, Repeated Assessments (e.g., 6 and 12 months after program separation) |
| <input type="checkbox"/> | Pre-Post Assessment with Single Post-Program Assessment |
| <input type="checkbox"/> | Pre-Post Assessment with Repeated Post-Program Assessments (e.g., 6 and 12 months after program separation) |
| <input checked="" type="checkbox"/> | Other (Specify) <i>See design diagrammed for question 4 above.</i> |

- 4b. If you are using a historical comparison group, describe how you will control for period and cohort effects.

Not applicable

5. **Cost/Benefit Analysis:** Indicate by checking “yes” or “no” whether you will be conducting a Program cost/benefit analysis that includes at least: a) the cost per participant of providing the interventions to the treatment and comparison groups; b) the cost savings to your county represented by the effectiveness of the treatment interventions; and, c) your assessment of the program’s future (e.g., it will continue as is, be changed significantly, be dropped) given the results of the cost/benefit analysis.

| Cost/Benefit Analysis | |
|---|-----------------------------|
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

- 5a. If you will perform a cost/benefit analysis, describe how that analysis will be performed.

The average cost per participant for the services provided under the treatment and comparison conditions will be calculated. The difference between these average costs will represent the savings or benefit to the county—assuming that the average cost per participant for the treatment group is less than that of the comparison group.

6. **Target Population:** This refers to the criteria that treatment and comparison subjects must meet in order to be able to participate in the research. Target criteria might include diagnostic categories, age, gender, risk level, legal history, geographical area of residence, etc. Please provide a detailed description of the criteria you will be using and how you will measure those criteria to determine eligibility.

The target population includes those individuals in custody during the grant period who have a history of prior offenses and at least one DSM-IV Axis I diagnosis. Presence of an Axis I diagnosis will be determined using the Diagnostic Interview Schedule (DIS-IV). The DIS will be administered by corrections' psychologists or psychiatrists.

- 6a. Describe any standardized instruments or procedures that will be used to determine eligibility for Program participation, and the eligibility criteria associated with each (e.g., "significant psychopathology" as measured by the MMPI, etc.).

Presence of a DSM-IV Axis I diagnosis is required for program eligibility. This eligibility criterion will be determined using the Diagnostic Interview Schedule (DIS-IV).

7. **Sample Size:** This refers to the number of subjects who will participate in the treatment and comparison samples during the entire course of the research. Of course, in any applied research program, subjects drop out for various reasons (e.g., moving out of the county, failure to complete the program). In addition, there will probably be mentally ill offenders who participate in the Program you will be researching and not be part of the research sample (e.g., they may not meet one or more of the criteria for participation in the research), or they may enter into the Program too late for you to conduct the follow-up the research you intend to do. **Using the table below**, indicate the number of participants who will complete the treatment interventions or comparison group interventions, plus the minimum six months follow-up period after Program completion. This also will be the number of subjects that you will be including in your statistical hypothesis testing to evaluate the Program outcomes. Provide a breakdown of the sample sizes for each of the four Program years, as well as the total Program. Under **Unit of Analysis**, check the box that best describes the unit of analysis you will be using in your design.

| Sample Sizes (Write the expected number in each group) | | | |
|--|-------------------------------------|--------------------------|--------------------------------------|
| Program Year | Treatment Group | | Comparison Group |
| First Year | 50 unduplicated | | 50 |
| Second Year | 100 (including 50 from First Year) | | 100 (including 50 from First Year) |
| Third Year | 100 (including 50 from Second Year) | | 100 (including 50 from Second Year) |
| Total | 150 unduplicated | | 150 unduplicated |
| Unit of Analysis (Check one) | | | |
| <input checked="" type="checkbox"/> | Individual Offender | <input type="checkbox"/> | Family |
| <input type="checkbox"/> | Institution | <input type="checkbox"/> | Geographic Area (e.g., neighborhood) |
| <input type="checkbox"/> | Other | <input type="checkbox"/> | Other: |

8. **Key Dates:**

- "Program Operational" is the date that the first treatment subject will start in the Program.
- "Final Treatment Completion" is the date when the last treatment subject in the research sample will finish the interventions that constitute the Program (and before the start of the follow-up period).
- "Final Follow Up Data" is the date when the last follow-up data will be gathered on a research subject (e.g., six months after the last subject completes the treatment interventions or whenever these data will become available).

Program Operational Date: 1/1/2000
 Final Treatment Completion Date: 6/30/2003 (for last cohort entering Options Project)
 Final Follow-Up Data Date: 6/30/2003 (for second cohort entering Options Project)

| Total Sample Size By Year | | | | | |
|---------------------------|----------------|---------------------|---------------------|---------------------|--------------------|
| Cohort | Size of Cohort | Year 1 | Year 2 | Year3 | Year4 (6 months) |
| | | 1/1/2000-12/31/2000 | 1/1/2001-12/31/2001 | 1/1/2002-12/31/2002 | 1/1/2003-6/30/2003 |
| 1 | 50 | X | X | FU | FU |
| 2 | 50 | | X | X | FU |
| 3 | 50 | | | X | X |
| Total N | 150 | 50 | 100 | 100 | 50 |

9. **Matching Criteria:** (Whether or not you are using a true experimental design), please indicate the variables that you will be tracking to assess comparability between the groups. Matching criteria might include: age, gender, ethnicity, socioeconomic status, criminal history mental health diagnosis, etc.

Equivalence of groups is achieved in true experimental designs through randomization of participants (Campbell & Stanley, 1963). We are using a true experimental design therefore matching is not necessary. However, we plan to conduct post hoc analyses on the following variables in order to verify the equivalence of our treatment groups: age, gender, ethnicity, and diagnoses.

- 9a. After each characteristic listed above, describe how it will be measured.

Age will be measured by the total number of circumnavigations of the Sun that the participant has made using the Planet Earth.

Gender will be self-identified by the participant using the following categories: male, female, other.

Ethnicity will be self-identified by the participant using the ethnicity categories currently in use by the California Department of Mental Health.

Diagnoses will be established using DSM-IV criteria.

- 9b. Which of these characteristics, if unequally distributed between the treatment and comparison groups, would complicate or confound the tests of your hypotheses? How will you manage that problem?

There are two issues relevant to this question:

The first issue is whether or not there is any theoretical basis to expect that differences on these variables will interact with our treatment and comparison conditions. We have no theoretical basis to expect such an interaction. While interaction effects are very interesting, the primary purpose of our demonstration project is to find an alternative treatment approach that is robust enough to be effective regardless of these variables. In this sense, we are primarily interested in the main effect of our treatment, and we have made no hypotheses with respect to these variables.

The second issue is how to handle unequally distributed characteristics in those situations in which they are hypothesized to have an interactive effect. There are varying opinions on how to resolve the issue of comparability in situations such as these. One approach is to attempt to match subjects in each of the research groups. While this approach is appealing, it also has problems. For example, we could attempt to match the groups on ethnicity and educational background. Such a matching strategy makes the implicit assumption that there are no interaction effects between ethnicity and educational background, i.e., an African American of a given educational background is the same as a Mexican-American of the same educational background. Is such an assumption warranted? In one sense, matching strategies simply project the question of comparability to a second level and still do not adequately ensure comparability of groups. It is precisely for this reason that

some authorities (Campbell & Stanley, 1963) argue that randomization remains the best means for preventing systematic differences between groups and ensuring the greatest level of comparability.

Given the constraints of our targeted population, sample size and proposed intervention, a multi-factorial design that could address these potentially confounding variables is not possible.

- 9c. If you are using an historical comparison group, describe how you will ensure comparability (in terms of target population and matching characteristics) between the groups.

Not applicable.

10. **Comparison Group:** The intent here is to document the kind of comparison group you will using. If you are using a true experimental design, the comparison group will be randomly selected from the same subject pool as the treatment subjects (in which case you would enter "true experimental design" in the space below). However, for quasi-experimental designs, the comparison group might come from a number of different sources such as: matched institutions, matched geographical areas, other matched counties, a matched historical group, etc.

Please identify the source of your comparison group.

True experimental design is being used. Comparison participants are selected from the same pool as are the treatment participants.

11. **Assessment Process:** The intent here is to summarize the assessment process that will determine the nature of the interventions that the mentally ill offenders in the treatment group will receive. For example, psychological testing, multi-agency and/or multi-disciplinary assessments, etc. Also, describe the qualifications of those who will be doing the assessments.

The same intervention will be applied to all participants in the treatment group; therefore, no assessment process will be used to aid in the differential determination of the intervention that is used with each participant.

- 11a. Describe any standardized assessment instruments that will be administered to all treatment group subjects for the purposes of identifying appropriate interventions.

Not applicable. See response to #11.

- 11b. Describe any assessment instrument designed by your county that you will use.

Not applicable.

- 11c. Identify which assessment instruments, if any, will also be administered to comparison group subjects.

Not applicable.

12. **Treatment Group Eligibility:** Indicate the process (as opposed to the criteria) by which research subjects will be selected into the pool from which treatment subjects will be chosen. This process might include referral by a judge, referral by a school official, referral by a law enforcement officer, administration of a risk assessment instrument, etc.

Correctional mental health staff provide screening and assessment, crisis intervention, and short term treatment for inmates housed in the jail facilities. Individuals screened positive for mental disorder by correctional mental health staff will be approached for participation in the project. Those individuals screened positive and consenting to be evaluated for participation in the project will be administered the Diagnostic Interview Schedule (DIS-IV). Individuals identified by this interview as having at least one DSM-IV Axis I diagnosis of a serious and chronic mental disorder will be included in the pool from which treatment subjects will be chosen.

13. **Comparison Group Eligibility:** Indicate the process by which research subjects will be selected into the pool from which comparison subjects will be chosen. For true experimental designs, this process will be the same as for treatment subjects.

Not applicable. True experimental design being used.

- 13a. If procedures for determining the eligibility of participants for the Comparison Group differ from those described in 12, please describe them. If different procedures are used, how will you ensure comparability of the two groups in terms of critical characteristics?

Not applicable.

Answer questions 14 - 17 by filling in the table below as instructed.

14. **Outcome Variables:** In the table below, list some of the most important outcome variables that you are hypothesizing will be positively affected by your Program. Possibilities include improvement in personal functioning, arrest rate, successful completion of probation, alcohol and drug-related behavior, risk classification, etc.
15. **Score/Scale:** To "measure" the effects produced by your Program requires putting the variable in question on some sort of measuring scale (e.g., a test score, a count of occurrences, a rating scale, a change-score indicating progress of some sort). For each variable, for which you are making a hypothesis, indicate in the table below the measurement that you will be statistically analyzing when you test your hypothesis.
16. **Additional Information:** To explain more fully how you intend to test your hypothesis, you might find it helpful to supply additional information. For example, you might intend to partition the data by gender, or make differential hypotheses for different age ranges. Supplying "additional information" is optional; but if there is some aspect of the hypotheses testing that is important for us to know about, please supply the information in this section.
- 16a. For each outcome variable that will not be measured by a standardized assessment procedure, describe the measurement procedures that will be used. For instance, if your county has developed a risk-assessment tool that you will be using to measure change, please describe how it works.
17. **Significance Test:** In order for a statistical procedure to be the appropriate test of a particular hypothesis, certain assumptions must be met. It is critical at the outset of a research design to make sure that the measuring devices, measuring scales, samples, and methodology produce the kind of data that fit the requirements of the intended statistical procedure. In this section, please list your choice for the testing of your hypothesis, given the research design you have chosen, the measurement you will use, and the data you will be collecting.

See table on next page.

| Major Hypotheses & Analyses | | | |
|---|--|---|---|
| 14. Outcome Variables | 15. Score/Scale | 16. Additional Information | 17. Significance Test |
| Group Analyses (Nomothetic) | | | |
| Costs: Arresting agency Jail Court Probation District attorney Public defender | Dollars spent | Repeated Measures ANOVA 2 (Group) X 11 (Observation) repeated measures analyses of variance | Overall F-test Tukey HSD post-hoc analyses (if significant F) Greenhouse-Geisser corrections (if necessary) |
| Recidivism Data: # of arrests # of contacts with law enforcement officials # custodial days. | Frequency of occurrence, i.e. number | Repeated Measures ANOVA 2 (Group) X 11 (Observation) repeated measures analyses of variance | Overall F-test Tukey HSD post-hoc analyses (if significant F) Greenhouse-Geisser corrections (if necessary) |
| Costs: Arresting agency Jail Court Probation District attorney Public defender | Dollars spent | <u>Multiple Regression Analyses</u> to identify significant predictors of costs: BASIS-32 score, Addiction Severity Index rating, Mental Health Screening Instrument score, homelessness status and diagnosis | Multiple R; R ² |
| Mental Health & Substance Use: Behavior & Symptom Identification Scale (BASIS-32) California Quality of Life (CA-QOL) | Overall score & subscales Overall score | Repeated Measures ANOVA 2 (Group) X 6 (Observation) repeated measures analyses of variance | Overall F-test Tukey HSD post-hoc analyses (if significant F) Greenhouse-Geisser corrections (if necessary) |
| Single Case Analyses (Idiographic) | | | |
| Costs: Arresting agency Jail Court Probation District attorney Public defender | Dollars spent | <u>Simple-Phase Change Single Case Design</u> (Barlow, 1984) | Not applicable |
| Mental Health & Substance Use: Behavior & Symptom Identification Scale (BASIS-32) California Quality of Life (CA-QOL) | Overall score & subscales Overall score | <u>Simple-Phase Change Single Case Design</u> (Barlow, 1984) | Not applicable |

The following questions are supplemental to the Research Design Summary Form and will help us understand how you intend to manage data collected for this project.

18. What additional background information (if any) will be collected for the participants (both treatment and comparison)? For instance, will you gather information about family criminal background, drug involvement, family variables, work history, educational background, etc. If so, what will be collected and how?

We do not currently plan to collect any data elements in addition those variables and measures tabled above.

19. How will the process evaluation be performed? What components will be addressed and how will they be measured (e.g., services available and frequency of use of those services by each participant)? What is the time frame for gathering process-related information? What recording mechanisms will be used? If descriptive or statistical analyses will be performed, please describe what they will be.

Meetings will be held during the implementation and ongoing administration of the Options Project. Among the agenda items addressed at these meetings will be the problems encountered during the course of the project as well as the steps taken to resolve these problems. As such, the minutes of these meetings will document this problem and resolution feedback cycle. At the end of the project a narrative report will be prepared from the detailed minutes of these meetings. The focus of the report will be to document the learning process experienced by the Options Project staff in order to provide guidance to counties or other entities attempting to implement similar programs. To this end, all "components" relating to the implementation management and delivery of services provided in the course of the project will be addressed in this descriptive report. (We consider service utilization frequency or service costs to be a "component" of our quantitative outcome analysis instead of a "component" of our process evaluation.)

20. Describe how you will document services received by the treatment and comparison group members. Examples are: how many counseling sessions did the subject attend, how intense (and by what measure) was the drug treatment, did the subject complete the interventions, etc.?

Service utilization by treatment and comparison group members is recorded in the mental health management information system. These data will be used to document the quantity and composition of the services received.

21. What will be the criteria for completion of the program (by what criteria will you decide that the research subject has received the full measure of the treatment that is hypothesized to have a beneficial impact. For instance, will the Program run for a specified amount of time irrespective of the participants' improvement or lack thereof? If so, how long? Alternatively, will completion be determined by the participants' having achieved a particular outcome? If so, what will that outcome be and how will it be measured? An example is decreased risk as measured by a "level of functioning" instrument.

Program completion is defined by a specified period of time (2 years) and not by a particular outcome. Given that one of the components of the intervention is increased case management services, we will be able to assess the integrity of our treatment delivery by analyzing our service utilization data.

22. If Program completion will be linked to probation terms, how will you record those terms and identify adequate completion? Examples include completion of mental health or substance abuse programs, etc.

Program completion is not linked to the terms of probation.

23. On what basis will a subject be terminated from the Program and be deemed to have failed to complete the Program? Will those who leave, drop out, fail, or are terminated from the Program be tracked in terms of the research dependent variables? For how long?

Participants will be terminated from the program only if they choose to withdraw their consent to participate. Withdrawal from participation will necessarily result in the loss of some of the dependent variable data (e.g., BASIS-32). However, system level data (e.g., service utilization) may still be tracked and may be used in subsequent data analyses.